

# DEPARTMENT OF PUBLIC HEALTH AND HUMAN SERVICES

## Communicable Disease Control

# Rocky Mountain Spotted Fever

(tick-borne typhus fever)

---

### What is rocky mountain spotted fever?

Rocky mountain spotted fever (RMSF) is a disease caused by a rickettsial organism transmitted to humans by a bite of an infected American dog tick, *Dermacentor variabilis*, and frequently other tick species. Three to five cases are reported annually in Montana.

### Who gets RMSF?

In the eastern United States, children are infected most frequently, while in the western United States, disease incidence is highest among adult males. Disease incidence is directly related to the exposure to tick-infested habitats or to infested pets.

### How is RMSF spread?

RMSF is spread by the bite of an infected tick (the American dog tick, the lone-star tick or the wood tick), or by contamination of the skin with tick blood or feces. Person to person spread of RMSF does not occur.

### What are the symptoms of RMSF?

RMSF is characterized by a sudden onset of moderate to high fever (which can last for two or three weeks), severe headache, fatigue, deep muscle pain, chills and rash. The rash begins on the legs or arms, may include the soles of the feet or palms of the hands and may spread rapidly to the trunk or rest of the body.

### How soon do symptoms appear?

Symptoms usually appear within two weeks of the bite of an infected tick.

### Does past infection with RMSF make a person immune?

One attack probably provides permanent immunity.

### What is the treatment for RMSF?

Certain antibiotics such as tetracycline or chloramphenicol may be effective in treating the disease.

### What can be done to prevent the spread of RMSF?

Frequent checking of clothing and skin when in infested areas is extremely useful in reducing potential incidence of disease. Tick repellents applied to legs and clothing may be helpful to prevent tick attachment. Due to the nature of American dog ticks, local populations may be effectively controlled with applications of pesticides to vegetation along trails: mowing grass frequently in yards, and outside fences also helps to reduce tick populations.

### How should a tick be removed?

To remove an attached tick, grasp with a firm and steady pressure. If tweezers are not available, use fingers shielded with tissue paper or rubber gloves. Do not handle with bare hands. Be careful not to squeeze, crush, or puncture the body of the tick which may contain infectious fluids. After removing the tick, thoroughly disinfect the bite site and wash hands. See or call a physician if there is concern about incomplete tick removal. It is important that a tick be removed as soon as it is discovered. Check after every two to three hours of outdoor activity for ticks attached to clothing or skin. If removal occurs within three hours after attachment, the risk of tick borne infection is reduced.